

**Remarks**

Claims 1-11 are pending. Claims 1, 10, and 11 have been amended.

**Rejection of Claims under 35 U.S.C. § 112**

Claims 1-11 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 10, and 11 have been amended to address the Examiner's rejection. The applicants respectfully submit that these amendments in no way change the scope of coverage of claims 1-11.

**Rejection of Claims under 35 U.S.C. § 103**

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Halle et al., "Fast Computer Graphics Rendering for Full Parallax Spatial Displays" (Halle). The applicants respectfully traverse these rejections.

Halle neither teaches nor suggests a computer-implemented method of rendering data for producing a full parallax autostereoscopic display of a digital scene including:

. . . for each image element, determining a distance between said eyepoint and said near clipping plane that would avoid near clipping of said scene, thereby determining a set of near clipping plane distances;

positioning said camera frustra along a z axis in accordance with one or more of said near clipping plane distances;

as required by independent claim 1 and generally required by independent claims 10 and 11. Thus, the applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

The Examiner acknowledges that Halle does not teach these claim limitations, but goes on to state:

These method steps, however, if not inherently or explicitly taught by Halle et al., certainly would have been obvious to have been performed (*read: implement*) by one having ordinary skill in the stereographic computer graphic art . . . (in light of the overall teachings explicitly disclosed by Halle et al.: esp. Section 4, "Clipping Planes," as well as Fig. 5), for at least the purpose of rendering said scene in a manner that achieves a desired image. (Office Action of March 25, 2003, p. 4, top).

The applicants respectfully disagree.

If it is the Examiner's position that the steps in question are not explicitly or inherently taught by Halle, then the applicants respectfully submit that the Examiner has not pointed to any prior art reference that teaches or suggests all of the claim limitations, a requirement for a *prima facie* case of obviousness as outlined in MPEP § 2143. The referenced portion of Halle does not teach or suggest the claim limitations. At best Section 4 of Halle mentions "potential problems" associated with the described technique and suggests that "the frustra can be broken up further into smaller sections, each rendered in a separate rendering pass." Nothing in Halle teaches or suggests *determining a distance between said eyepoint and said near clipping plane . . . , or positioning said camera frustra along a z axis in accordance with one or more of said near clipping plane distances*. In fact, the applicants explicitly acknowledge the deficiencies in the teachings of Halle in this regard on page 8, lines 3-8 of their specification.

Moreover, in addition to the claim elements not taught or suggested by Halle as described above, the Examiner has not shown that there is some suggestion or motivation to combine the explicit teachings of Halle with any other teaching or knowledge of one having ordinary skill in the art. Halle does not suggest such a combination, and the Examiner makes only vague reference to "for at least the purpose of rendering said scene in a manner that achieves a desired image" as motivation. Thus, the applicants respectfully submit that the Examiner has failed to explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination, as required by, for example, *In re Rouffet*, 47 USPQ2d 1453 (Fed. Cir. 1998).

If, however, it is the Examiner's position that Halle inherently teaches the method steps described above, then the applicants note that MPEP § 2112 makes clear the fact that the Examiner must provide rationale or evidence tending to show inherency:

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)

The applicants respectfully submit that the Examiner has provided no such evidence or rationale tending to show inherency.

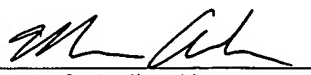
Regarding the Examiner's comments with respect to the preambles of claims 10 and 11, the applicants respectfully submit that these preambles should be accorded patentable weight at least in so far as the preambles set out the nature of claim. MPEP §2111.02 discusses generally the weight of claim preambles. In particular it states that:

The preamble is not given the effect of a limitation unless it breathes life and meaning into the claim. In order to limit the claim, the preamble must be "essential to point out the invention defined by the claim." (Citation omitted).


The applicants respectfully submit that the preambles to both claim 10 and claim 11 are essential to point out the invention defined by the claim. Claim 10 is written in the form of a product-by-process claim where the product is defined in terms of the process by which it is made. See, for example, MPEP §2173.05(p). Claim 11 is written in the form of functional descriptive material recorded on some computer readable medium. See, for example, MPEP §2106 (IV)(B)(1), ¶2. In both cases, the preamble is necessary to point out the invention defined by the claim and should therefore be given the effect of a limitation.

Accordingly, the applicants respectfully submit that independent claims 1, 10, and 11 are allowable over Halle. Claims 2-9 depend from independent claim 1 and are allowable for at least this reason.

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450, on <u>July 25</u> , 2003.	
	<u>7/25/03</u>
Attorney for Applicant(s)	Date of Signature

Respectfully submitted,



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